

# **Economic Evidence and Section 628(c)(2)(D)**

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## Summary

In order to carry the burden of demonstrating that extension of the ban on program exclusivity contained in Section 628(c)(2)(D) is “necessary to preserve and protect competition and diversity in the distribution of video programming,” the Commission needs substantial empirical evidence that the ban brings significant net benefits to consumers. The benefits must accrue to consumers because “competition and diversity” benefit consumers, not competitors.

There exist well-known tools for measuring the empirical effects of economic policies on consumer welfare, including cost-benefit analysis and multiple regression analysis. When, as here, economic theory predicts that the effects of a policy may be either harmful or beneficial to consumers, use of these tools to establish rigorous empirical evidence of actual effects is essential to sound policy development. Quantification of the actual effect of a regulatory intervention is especially important when Congress has established a standard (“necessary”) that cannot be met simply by demonstrating the direction or sign of the economic effect of the intervention.

Econometric analysis of supply and demand issues pertaining to regulation of cable television has been conducted in the past, including studies conducted by the Commission itself in the course of regulating cable rates. To insist on sound empirical analysis of the present issue is not to ask for the impossible. Indeed, we describe below how such an analysis could be conducted. However, the record in this proceeding contains *no* serious empirical analysis of the effect of the current rule on consumers whether through effects on competition or through effects on diversity. Even with respect to the effects on competitors, the record contains no more than a single anecdote which, taken in context, merely demonstrates the lack of correlation between exclusivity and the success of competitors. Thus, there is no economic basis upon which the Commission could rationally conclude that the current rule is not harmful to consumers, much less “necessary” to ensure continued consumer benefits.

## Background

1. The FCC is considering whether to retain a rule that “generally prohibits, in areas served by a cable operator, exclusive contracts for satellite cable programming or satellite broadcast programming between vertically integrated programming vendors and cable operators.”<sup>1</sup>
2. The rationale for retaining this rule (and presumably Congress’ reason for enacting it in 1992) is the argument that incumbent cable operators must be prevented from engaging in behavior that would limit competition.<sup>2</sup> Proponents of the rule argue that, absent the rule, multichannel video program distributors (MVPDs) would be deterred from competing against cable operators for subscribers.<sup>3</sup> Specifically, the concern is that competitors would be unable to purchase attractive programming at competitive prices, and therefore would be less likely to enter the market or to thrive once having entered. Given the statutory framework and sunset provision, the burden falls on proponents of retention to demonstrate that the rule remains “necessary” to preserve competition in MVPD markets.
3. Responsible public policy analysis would support retention of the rule if it could be demonstrated that the rule has and will continue to result in significant benefits to consumers. Generally accepted methods of economic policy analysis, described below, provide methods and standards for measuring the effects of the rule on consumers. However, the record in this proceeding contains no analysis that meets even

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<sup>1</sup> In the matter of Implementation of the Cable Television Consumer Protection and Competition Act of 1992, Development of Competition and Diversity in Video Programming Distribution: Section 628(c)(5) of the Communications Act; and Sunset of Exclusive Contract Prohibition, CS Docket No. 01-290, Notice of Proposed Rulemaking (NPRM), ¶ 1.

<sup>2</sup> NPRM, ¶ 2.

<sup>3</sup> “[I]n the absence of the prohibition on exclusive contracts, cable operators would still have the incentive and ability to harm consumers by foreclosing access to vertically integrated programming to competing MVPD providers.” Jonathan M. Orszag, Peter R. Orszag and John M. Gale, “An Economic Assessment of the Exclusive Contract Prohibition Between Vertically Integrated Cable Operators and Programmers,” commissioned by EchoStar Satellite Corporation and DIRECTV, Inc., January 2002, p. 31.

minimal standards for economic reliability or rigor. In particular, the study commissioned by EchoStar and DIRECTV provides no evidence beyond a single anecdote (to the effect that DBS penetration is lower in Philadelphia than in some other cities, holding *nothing* constant.)

4. Economic theory suggests that extension of the rule might produce both costs and benefits. The potential costs of extending the rule include harm to consumers arising from disincentives to invest in intellectual property, a reduction in the diversity of content, and the other distortions that result when government favors one competitor in a market at the expense of another.<sup>4</sup> The potential benefits might include reduction or elimination of entry barriers that would arise from the creation and exercise of exclusive intellectual property rights in video programming, and the resulting lower prices from increased competition in the delivery of common (nonexclusive) programming. Theory alone, in the absence of rigorous analysis of the facts, is not sufficient to demonstrate whether the rule is necessary to benefit consumers, much less *how much* benefit it would provide.

#### **The need to measure**

5. Extension of the rule could be said to be “necessary” if the increased consumer surplus (if any) from lower prices for video program delivery significantly exceeds the lost consumer surplus from decreased output of video products and the higher prices that result from artificial creation or preservation of inefficient delivery services. But merely ascertaining whether the benefits exceed the costs, or whether the direction or sign of the net effect of the rule on consumer welfare is positive, is not sufficient to support extension of the rule. The statutory condition that extension be *necessary* to the preservation of competition and diversity implies that the mag-

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<sup>4</sup> For an exploration of the various effects of the rule on consumers, see Economists Incorporated, “Competition For Video Programming: Economic Effects of Exclusive Distribution Contracts,” attached to Comments of Cablevision Systems Corp., In the matter of Implementation of the Cable Television Consumer Protection and Competition Act of 1992, Development of Competition and Diversity in Video

nitude of the effect (or the amount of the net increment to consumer welfare) must be ascertained and found to be more than incidental or minor.<sup>5</sup>

6. A threshold empirical issue is whether exclusivity has any measurable effect on the likelihood of entry or on the business success of MVPD competitors. If exclusivity has no measurable effect in deterring entry or promoting the success of entrants, obviously continuing the rule cannot be justified. If the ban on exclusivity does have an economically significant positive effect on the prospects of new entrants, the policy question changes to whether that effect translates into a net benefit to consumers as described above, and if so whether the net benefit to consumers is large enough to satisfy the “necessary” standard in the statute. The term “necessary” clearly implies that the quantitative contribution of the rule to consumer welfare should be major rather than minor.
7. An empirical test is needed to see whether retaining the rule would generate significant consumer benefits. The ultimate test of the effect of the rule must be based on a measurement of the increment to consumer surplus in the market for video services, since this is the ultimate measure of economic welfare.<sup>6</sup>
8. Prior to embarking on a full-fledged welfare analysis, however, there is a narrower threshold issue: the effect of the rule on the extent of competition faced by incumbent cable operators. That effect of exclusivity could be measured, for example, by the effect on penetration of competing MVPDs in areas in which the incumbent cable operator has obtained exclusive programming. A finding of some such effect

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Programming Distribution: Section 628(c)(5) of the Communications Act; and Sunset of Exclusive Contract Prohibition, CS Docket No. 01-290, December 2, 2001.

<sup>5</sup> One could interpret the preservation of competition and diversity as an either/or proposition, in which case extension of the rule would require a showing that without it there would be no competition at all. Alternatively, competition might be regarded as a matter of degree, measured in economic terms by the extent to which all of its potential benefits to consumers had been realized.

<sup>6</sup> A broader standard would look to total rather than merely consumer surplus. If consumer benefits alone are taken to be the statutory objective, supply responses to changes in producer rents, especially in this case those affecting the production of intellectual property, should be traced through to their effects on consumers. In other words, a general equilibrium analysis should be conducted.

would not be sufficient to indicate either the direction or the magnitude of the consumer welfare consequences of the rule, and would merely underline the necessity for a consumer welfare measurement. The *absence* of such an effect or a finding of only a small effect, however, would surely be strong evidence that the rule was not “necessary” to achieve the statutory objectives. Thus, to the extent it involves a simpler question and one for which data may be more readily available, measurement of the impact of the rule on competitors could serve as a helpful screening device. Nevertheless, an adequate measurement even of this limited potential effect of the rule can be made only if all other factors that affect MVPD competition are held constant. In the next section we describe the dimensions of such a study.

### **How to measure**

9. This section describes in general terms the use of multiple regression analysis to measure empirically the magnitude of the impact of the exclusivity rule on the economic success of MVPDs who compete with incumbent cable operators. Such an analysis, performed rigorously, could assist the Commission either by ruling out the possibility that the rule is “necessary” to achieve the objectives of the statute or by indicating that a fuller analysis of consumer costs and benefits is required.
10. Regression analysis is a statistical method often used to study how some variable of interest is affected by one or more independent factors. Regression analysis is a suitable tool for this kind of measurement, and is by far the most commonly-used method of understanding and measuring economic effects in a complicated world.
11. Statistical measurement of an economic effect must begin with an economic theory of the relationships that determine the effect to be measured. Absent such a theory there is serious risk of error in the measurement process due to the omission of an important explanatory factor or relationship or the inclusion of a factor with which the effect in question is correlated only “spuriously.” While the economic theory that lies behind a particular measurement strategy or “specification” is not always

spelled out in detail, the measurement itself can be invalidated by an erroneous or incomplete theory.

12. One variable in a regression analysis is referred to as the “dependent variable,” since its level depends on or is explained by the levels of the other factors in the analysis. The factors believed to affect the dependent variable are referred to as “explanatory variables,” since they determine or explain the level of the dependent variable.<sup>7</sup>
13. A regression provides an estimate of the sign and size of the separate effect of each explanatory variable on the dependent variable. In other words, the effect of each explanatory variable can be isolated by controlling for (holding constant) the effects of all the other explanatory variables. This estimated effect is referred to as a coefficient.
14. A dependent variable in the present case might be the penetration percentage or market share of competing MVPD providers within a given incumbent cable franchise area. The chief explanatory variable of interest might be whether or not the incumbent cable operator has exclusive local distribution rights with respect to certain (or any) video programming. In its simplest form, this “dichotomous” variable can take on one of two values: yes or no. In a fully developed regression analysis in which the effects of all other factors are held constant, the estimated coefficient on this yes-no variable would then give a direct measure of the difference in non-incumbent MVPD penetration rate that occurs when the local cable operator does or does not carry video programming on an exclusive basis. A more elaborate test would group programming into program types and perform a separate “yes-no” test of the effect of exclusivity of each programming type. One could also measure exclusive programming as a percentage of total programming carried (or of programming carried within a programming type). If exclusivity is measured in this way, the

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<sup>7</sup> For further explanation, see for instance Daniel L. Rubinfeld, “Reference Guide on Multiple Regression” in Federal Judicial Center, *Reference Manual on Scientific Evidence*, 2d ed., 2000.

coefficient can be interpreted as the effect on the non-incumbent MVPD penetration rate of a certain percentage change (say, 1 percent) in the amount of exclusive programming carried by the local cable operator. If the measured effect of exclusivity is zero or small, further inquiry could be avoided because the “necessary” test would not be met; if the measured effect is substantial, a consumer welfare analysis would be required to see if the test is met.

15. The regression analysis basically is a statistical test to determine, after adjusting for the effects of all other relevant factors, whether competing MVPD penetration is significantly lower in areas in which the cable operator has programming exclusivity; and if so, what is the magnitude of the effect. This test presupposes that there are a significant number of cable systems that have obtained programming exclusivity that is not prohibited by the rule.<sup>8</sup> Program suppliers that are not vertically integrated are not prohibited from entering exclusive agreements with cable operators. Some well-known services of this type, according to the Commission, are A&E, CNBC, ESPN, Nickelodeon/Nick-at-Nite, MTV and TNN.<sup>9</sup>
16. The other “explanatory” variables in the study serve to hold constant the factors other than cable programming exclusivity that could affect MVPD penetration within a local cable franchise area. These variables should include at least the following:

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<sup>8</sup> If, in fact, there are few or no cable systems that have obtained exclusive programming that is currently permitted, it cannot plausibly be argued that the rule should be retained. In entering an exclusive arrangement, a program supplier reduces the number of MVPDs to which it can sell its programming. The supplier will only do so if the cable operator (or other MVPD) requesting exclusivity is willing to pay a sufficient premium. Cable operators will only be able to pay a premium if they obtain a significant competitive advantage from exclusivity. If there are no (or trivially few) instances in which a cable system has obtained exclusivity, there is no basis to believe that exclusivity that is currently prohibited by the rule would provide such a significant competitive advantage that other MVPDs would be unable to compete.

<sup>9</sup> See *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Eighth Annual Report, FCC 01-398, Appendix D, Table D-6 (2001). These programs are all among the top 20 programming services, ranked by number of subscribers.



- a. Characteristics of the cable service offered (e.g., number of networks by type and tier, non-video service options, programming tiers).
  - b. Prices charged by the cable operator by option/tier.
  - c. Competitive structure in the area (e.g., broadcast channels available, other video and nonvideo entertainment options, number of homes passed).
  - d. Local demographic characteristics (e.g., median household income, age distribution, education, degree of urbanization, geographic location).
17. Various issues arise in regression analysis which must be appropriately dealt with for the results to be valid. For instance, specialized techniques are needed when two or more of the explanatory variables not only affect the dependent variable but also affect one another. This condition is referred to as “simultaneity.” The analysis must cover, if not all local cable franchise areas, at least a large random sample of such areas both in order to be representative and in order to minimize statistical error. The full list of methodological issues is not brief.

**Retention of the rule is not supported by measurement**

18. The FCC has not articulated a quantitative or objective standard stating how large an effect is needed to justify retaining the rule. This point is moot, however, because the record in this proceeding contains no reliable empirical measure of the magnitude of the effect of cable programming exclusivity on competing MVPDs.
19. EchoStar and DirecTV, advocates of retaining the rule, commissioned a study by Orszag, Orszag and Gale, “An Economic Assessment of the Exclusive Contract Prohibition Between Vertically Integrated Cable Operators and Programmers.” This EchoStar submission however presents no systematic study of MVPD competition and makes no attempt to isolate the effect of exclusive programming from the many other factors that can affect MVPD penetration in a local area. The only empirical evidence offered is the observation that in Philadelphia, an area in which Comcast

has obtained exclusive programming permitted by the rule, DBS penetration is lower than the national average and lower than the average in the top 20 cities (pp. 21-24). No analysis is presented to show that other factors affecting DBS penetration are the same in Philadelphia as in the comparison cities, or analyzing whether some subset of these cities or cities outside of the top 20 would offer a better comparison. It is impossible to give credence to empirical evidence that does not hold other relevant factors constant.

20. Furthermore, the EchoStar paper does not consider evidence from any other area in which a cable operator has obtained exclusive programming. For instance, New York is another city in which cable operators have exclusive programming. The paper offers no explanation why DBS penetration in New York is higher than in Boston and San Francisco, where exclusive cable programming is not presently significant. Such anecdotal evidence merely points out the absence of any simple relationship between exclusivity and DBS penetration, and demonstrates the need for a proper study that controls for all relevant factors.
21. Finally, even if a reliable empirical study of the effects of the current rule on competing MVPDs had been submitted, and even if the study had shown a substantial beneficial effect on competing MVPD providers, the work of justifying retention of the rule would merely have begun. Such a result is necessary but by no means sufficient to demonstrate that the rule is “necessary to preserve and protect competition and diversity.” The Commission could not rely on such a study to demonstrate competitive (i.e., consumer) benefits from the rule, because to do so would be to confuse harm to competitors with harm to competition. Instead, a more complicated study of the effects of the rule on consumer welfare would be in order. Further, as suggested by Congress, diversity is an important aspect of the potential consumer welfare impact of the rule. The rule on its face obviously discourages content diversity. Whether the rule increases source diversity depends on whether it permits the existence of competitors who would not otherwise be present, not on whether it increases the market share of one competitor at the expense of another. Consumer

welfare is as dependent on the range and quality of available programming choices as it is on prices. No one has produced empirical evidence on these issues in this proceeding.

22. Finally, we observe that to insist on sound empirical analysis of the present issue is not to ask for the impossible. Econometric analysis of supply and demand issues pertaining to regulation of cable television has been conducted in the past,<sup>10</sup> including studies conducted by the Commission itself in the course of regulating cable rates.<sup>11</sup>

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<sup>10</sup> Examples include Robert N. Rubiovitz, "Market Power and Price Increases for Basic Cable Service since Deregulation," *Rand Journal of Economics*, Spring 1993, 24(1), pp. 1–18; Robert W. Crandall and Harold Furchtgott-Roth, *Cable TV: Competition or Regulation* (Brookings, 1996); and Tasneem Chipty, Vertical Integration, Market Foreclosure, and Consumer Welfare in the Cable Television Industry, *Amer. Econ. Rev.* June 2001, 91(3), pp. 428-53.

<sup>11</sup> See the studies in Commission Docket MM92-266.